

DUXBURY BEACH

Thursday, September 16, 1965

DUXBURY CLIPPER



AS WAS AND AS IS:

PICTURED ABOVE IS A
DUNE AT DUXBURY BEACH.

AT RIGHT

A DUNE IN 1920



EROSION OF DUXBURY BEACH

(Stuart Huckins of Powder Point wrote the following article, which should be of great interest to Duxbury residents. -- Ed.)

For centuries within the knowledge of man, and probably for countless prior centuries, Duxbury Beach has served effectively as a natural barrier protecting the inner shores of Duxbury, Kingston, and Plymouth from ocean storms. Conservation of the beach itself is therefore of major importance both for its role as a barrier to the sea and for its values as a place for responsible enjoyment of its natural features. It is presently threatened by man-damage which in turn leads to increased storm damage.

Until about 20 years ago the profile of the beach included high dunes supported and maintained by a variety of sturdy vegetation. Many dunes were in the order of eight to 12 feet in height above contiguous levels. Although in exceptionally severe northeast storms, combined with high courses of tides, seas have been known to sweep over the beach at a number of relatively low points, abundant vegetation assisted natural forces in rebuilding dunes and in substantial recovery from erosion.

For something like three decades the beach itself ably discouraged automobiles from venturing upon its "treacherous sands. Then there was nothing to alter the contours and profiles except winds and waves which lowered the sands here and built them up there in the accustomed manner of natural phenomena.

In those days walking to High Pines or Gurnet and back was an adventurous delight and worthy exercise shared by the Coast Guardsmen who had to do it and by many who enjoyed recreation in its truest sense through appreciation of unspoiled wildness. Much shorter strolls had their rewards also, for the degree of perception and contemplation is inverse to speed, just as it is today. The pace was slow and therefore the individuality of every wave, of every shell and stone, of every rivulet on hard sand made itself known, and our enjoyment was not inhibited by wariness of traffic, broken glass, and non-indigenous flotsam and jetsam.

Soon, however, the genius of man overcame vehicular ineptitude, and automobiles presently achieved the capacity to be driven anywhere and everywhere on the beach. And that is exactly what they have been doing, and it is precisely our problem. Progress in automotive engineering has been accompanied by one of the handmaidens of Progress -- Outdoor Recreation. Now that the outdoors can be experienced by automation in a sedentary manner, the matter of beach-erosion has become critical.

Long before the word "conservation" gained the currency it enjoys, the Duxbury Beach Association recognized its principles and the consequent need to protect the beach against both damage and mis-use. A valuable article entitled "A Half Century of Duxbury Beach" published in the Clipper of Sept. 27, 1951, took note of the important part played by vegetation and the dangers of its destruction by mechanical erosion. In this connection the article stated: "The situation is aggravated by the fact that beach grass and other vegetation alone maintains the sand dunes at a height which affords some protection to the beach; and the parking areas which most need this protection are at the same points where public use of the beach destroys the beach grass." Over the years in mutual appreciation of the broad objectives of maintaining the beach in its natural state, the Town of Duxbury and the Beach Association have co-operated in its protection by the establishment and enforcement of regulations under which the public is invited to use the beach, and by the erection of physical barriers to erosion. In spite of consistent efforts toward these objectives, increased use of the beach by vehicles and people has resulted in progressive deterioration of its natural characteristics. Conservation has been lagging behind mis-use and the urgency of further protective steps is apparent.

The accompanying photographs taken in 1962 clearly show the part played by vegetation, if left alone, and the damage to which it is subjected by vehicular erosion. Mechanical erosion is not only destructive in itself, but it also opens up avenues for further erosion by storms. A close look at the photographs -- and better still, personal observation of the conditions -- will reveal how the seas gain access through wheel tracks and sweep over and between dunes which previously afforded natural protection. The validity of the regulation which forbids driving in or over dunes is obvious; equally clear is the need to enforce this regulation.

In the Fall of last year the Powder Point Association, recognizing the importance of controls, provided 800 feet of "snow-fencing" which was erected southward from the bridge by the generous labor of a group of volunteers enlisted from various parts of the town. The purpose of this fencing is two-fold: first, to encourage rebuilding of sand and vegetation; and, second, to discourage transverse driving across the beach. This Autumn another thousand feet of snow-fence has been purchased jointly by the Duxbury Beach Association and the Powder Point Association. It is planned to have this additional fencing erected the latter part of this month by other volunteers in conjunction with a general "beach clean-up drive." A substantial number of erosion-control signs have been purchased by both associations for placement at strategic places to inform the public of the purpose of these controls and to establish an awareness of the need.

In addition to the efforts already undertaken, investigations are underway with respect to the practicability of planting grasses and bushes to re-establish vegetation that has been destroyed. It is contemplated to set up experimental areas to determine the performance and predictable effectiveness of different plantings.

It is to be hoped that continued co-operation between town officials and departments, the associations mentioned, other volunteer groups, and the Conservation Commission, will result in substantial improvements in the overall situation next year. Understanding of purposes and the co-operation of residents and all users of the beach will be of material assistance toward accomplishment of constructive objectives.

* Ed. note: See notice Page One